

FAN SCHEDULE

SYMBOL	LOCATION	TYPE	CFM	APPROX. S.P.	DRIVE	FAN REM.	ELECTRICAL DATA		MANUFACTURER	ACCESSORIES	CONTROLS
							WATTS	VOLTS			
F-1	SALLYPORT	SUPPLY	1000	0.25"	BELT	1750	1/4	120V-1#	AS-12-433-A	A,B,D,E	9
F-2	SALLYPORT	EXHAUST	1000	0.25"	BELT	1348	1/4	120V-1#	GB-091	A,B,D,E	9
F-3	WOMEN 128	EXHAUST	225	0.25"	DIRECT	1000	83	120V-1#	SP-A250	A,B,F,O	2
F-4	TOILET 143	EXHAUST	75	0.25"	DIRECT	950	17	120V-1#	SP-A110	A,B,F,O	2
F-5	DRUG STOR 131	EXHAUST	75	0.25"	DIRECT	950	17	120V-1#	SP-A110	A,B,F,O	6
F-6	MEN 124	EXHAUST	225	0.25"	DIRECT	1000	83	120V-1#	SP-A250	A,B,F,O	2
F-7	TOILET 107	EXHAUST	75	0.25"	DIRECT	950	17	120V-1#	SP-A110	A,B,F,O	2
F-8	TOILET 106	EXHAUST	75	0.25"	DIRECT	950	17	120V-1#	SP-A110	A,B,F,O	2

ACCESSORIES		CONTROLS
A: DISCONNECT SWITCH	M: 2" WASHABLE ALUMINUM FILTERS	1: WALL MOUNTED THERMOSTAT (REVERSE ACTING, SET FOR 80°)
B: GRAVITY BACKDRAFT DAMPER	N: MOTORIZED FAN GUARD	2: INTERLOCK WITH ROOM LIGHT SWITCH (FAN SHALL OPERATE WHEN LIGHT IS ON IN ANY ROOM SERVED BY FAN)
C: MOTORIZED BACKDRAFT DAMPER	O: EXHAUST GRILLE	3: WALL MOUNTED ON/OFF SWITCH WITH IDENTIFICATION LABEL
D: PREFAB. ROOF CURB	P: ULL 752	4: WALL MOUNTED MUSHROOM PUSH BUTTON SWITCH/STARTER WITH IDENTIFICATION LABEL
E: BIRDSCREEN	Q: VENTED ROOF CURB EXTENSION	5: CONTROLLED BY BUILDING AUTOMATION SYSTEM
F: ACOUSTICAL LINING	R: COMBINATION KITCHEN HOOD FAN CURB	6: CONTINUOUS OPERATION
G: HANGING BRACKETS WITH VIBRATION ISOLATION	S: INTERLOCK WITH FLAME HOOD	7: INTERLOCK WITH KITCHEN HOOD CONTROLS
H: WL, WALL LOUVER DISCHARGE	T: PROVIDE DRAIN PLUG ACCESSORY	8: INTERLOCK WITH DISHWASHER
I: RCC OR GRS ROOF CAP (FLAT ROOF) OR RJ ROOF CAP (PITCHED ROOF)		9: INTERLOCK WITH CO AND NO2 SENSORS. SEE NOTE #5 BELOW
K: WALL MOUNTING COLLAR		
L: INLET GUARD		

- NOTES:**
- ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW. ALL FANS INSTALLED INSIDE, ABOVE, OR ADJACENT TO OCCUPIED SPACES SHALL HAVE A MAXIMUM 9.0 INLET SONE LEVEL.
 - ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
 - MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AS REQUIRED.
 - PROVIDE ALL DIRECT DRIVE FANS WITH SPEED CONTROLLERS.
 - CARBON MONOXIDE DETECTORS AND NITROGEN DIOXIDE DETECTORS SHALL BE PROVIDED IN SALLY PORT (SEE PLANS FOR LOCATIONS) FOR FANS F-1 & F-2. THE CARBON MONOXIDE DETECTOR SHALL ACTIVATE FAN SET UPON A DETECTION OF CARBON MONOXIDE EXCEEDING 25 PARTS PER MILLION AND NITROGEN DIOXIDE DETECTORS SHALL ACTIVATE FAN SET UPON DETECTION OF NITROGEN DIOXIDE EXCEEDING 0.7 PARTS PER MILLION. CO AND NO2 DETECTORS TO BE PROVIDED BY M.C. AND WIRED TO ACTIVATE FANS BY THE ELECTRICAL CONTRACTOR.

ELECTRIC HEATER SCHEDULE

SYMBOL	LOCATION	CFM	BTUH	KW	R.P.M.	H.P.	VOLTAGE	MANUFACTURER	REMARKS
EH-1	SPRINKLER ROOM 151	175	6826	2.0	---	---	208V-1#	G3314TS-RP	
EH-2	MECH ROOM 104	175	6826	2.0	---	---	208V-1#	G3314TS-RP	
EH-3	MECH ROOM 146	175	6826	2.0	---	---	208V-1#	G3314TS-RP	
EH-4	EXTERIOR STORAGE 10	175	6826	2.0	---	---	208V-1#	G3314TS-RP	
EH-5	MEZZANINE	175	6826	2.0	---	---	208V-1#	G3314TS-RP	

- NOTES:**
- HEATING CAPACITY BASED ON 65° F. E.A.T.
 - PROVIDE EACH WALL HEATER WITH BUILT-IN DISCONNECT SWITCH AND THERMOSTAT, PENCL-PROOF LOUVERS, AND CABINET FOR SURFACE MOUNTING. (NOTE: COORDINATE EXACT LOCATION WITH OTHER EQUIPMENT IN ROOM, SET TO MAINTAIN 45°F.)
 - TERMOSTATS SHALL BE LOW VOLTAGE, LINE VOLTAGE THERMOSTATS ARE NOT ACCEPTABLE.

ENERGY RECOVERY VENTILATOR SCHEDULE

SYMBOL	LOCATION	SUPPLY AIR			EXHAUST AIR			POWER		SUMMER SUPPLY AIR CONDITIONS (° F)					WINTER SUPPLY AIR CONDITIONS (° F)					MANUFACTURER	
		CFM	ESP	FAN HP	CFM	ESP	FAN HP	MCA	MDCF	VOLTAJE	DRY BULB	WET BULB	SPEC. HUM.	ENTHALPY	DRY BULB	WET BULB	SPEC. HUM.	ENTHALPY	WEIGHT		
ERV-1	MEZZANINE	1000	0.5"	0.5	1200	0.5"	0.5	17.7	23.0	208V-1#	78.3	66.0	80	31.5	61.4	48.5	32	19.8	1206	LBS	GREENHECK MODEL ERV-45-30L

- NOTES:**
- ALL TEMPERATURES ARE MEASURED IN DEGREES FAHRENHEIT, SPECIFIC HUMIDITY IS MEASURED IN GRAINS PER POUND DRY AIR, AND ENTHALPY IS MEASURED IN BTU'S PER POUND.
 - OUTDOOR DESIGN CONDITIONS: SUMMER: 94° F. D.B., 77° F. W.B. WINTER: 21° F. D.B.
 - INDOOR DESIGN CONDITIONS: SUMMER: 75° F. D.B., 50% RELATIVE HUMIDITY. WINTER: 70° F. D.B., 35% RELATIVE HUMIDITY.
 - FURNISH UNITS WITH: HINGED ACCESS DOORS, ENTHALPY SENSOR WITH AUTOMATIC WINTER OVERRIDE, PLEATED 30% EXHAUST AND OUTSIDE AIR FILTERS, SINGLE POINT ELECTRICAL CONNECTION, MOTORIZED OUTSIDE AIR AND EXHAUST DAMPERS, ROOF CURB.
 - UNITS MUST BE AMCA CERTIFIED.

DUCTLESS SPLIT SYSTEMS (DX COOLING ONLY)

INDOOR UNIT								OUTDOOR UNIT														
SYMBOL	CFM	COOLING CAPACITY		HEATING CAPACITY		ELECTRICAL DATA		MANUFACTURER	SYMBOL	COOLING CAPACITY		EFF. SEER	HEATING CAPACITY		COMPRESSIONER	FAN	ELECTRICAL DATA		OPERATING WEIGHT	MANUFACTURER		
		IC (BTUH)	SHC (BTUH)	BTUH	BTUH	FAN FLA	MCA			VOLTAGE	IC (BTUH)		SHC (BTUH)	LR			RLA	FLA			MCA	MDRIP
A/C-1	425	12,000	9,720	N/A - COOL ONLY	0.33	1.0	208V-1#	MITSUBISHI	DDU-1	12,000	9,720	15.2	10,100	10,100	14	12	0.35	1.3	15	208V-1#	95 LBS	MITSUBISHI PUY-A12NHA

- NOTES:**
- ALL UNITS SHALL BE U.L. LISTED AND HAVE A MINIMUM SEER OF 13.
 - COOLING CAPACITIES ARE BASED ON 95° AMBIENT, 80° ENTERING AIR DRY BULB, 67° ENTERING AIR WET BULB. AIRFLOWS INDICATED ARE AT HIGH SPEED.
 - MOUNT GROUND-MOUNTED UNITS ON 6" CONCRETE PAD. MOUNT UNITS ON ROOF ON EQUIPMENT SUPPORT RAILS AS MFG. BY ROOF PRODUCTS AND SERVICE CORP. (OR EQUAL).
 - PROVIDE MANUFACTURER'S SUGGESTED CLEARANCES AROUND UNIT.
 - PROVIDE UNITS WITH MANUFACTURER'S WIND BAFFLES OR LOW AMBIENT CONTROLS FOR OPERATION DOWN TO 0° F, CONDENSATE PUMP, INVERTER COMPRESSOR, HARD WIRED WALL-MOUNTED BACKLIT CONTROLLER (EQUAL TO PAR-31MAA), INTEGRAL NON-LOCKING DISCONNECT FOR INDOOR UNIT, AND PRIMARY COOLING COIL DRAIN PAN FLOT SWITCH.
 - PROVIDE OUTDOOR UNITS WITH 6 YEAR EXTENDED COMPRESSOR WARRANTY.
 - SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED ADDITIONAL REFRIGERANT CHARGE AND RECOMMENDED LINE-SET LENGTHS.
 - POWER SUPPLY TO CONDENSING UNIT IS A SINGLE POINT ELECTRICAL CONNECTION FOR THE SYSTEM (A/C UNIT AND CONDENSING UNIT). THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO THE CONDENSING UNIT AND FROM THE CONDENSING UNIT TO THE A/C UNIT INCLUDING CODE REQUIRED DISCONNECT SWITCHES.
 - REFRIGERANT PIPING AND WIRING FOR WALL-MOUNTED INDOOR UNITS SHALL BE ROUTED IN WALL WHERE POSSIBLE. ANY EXPOSED PIPING SHALL BE PAINTED TO MATCH WALL-FINISH.
 - PRIMARY COOLING COIL DRAIN PAN SHALL BE PROVIDED WITH A FLOT SWITCH BY UNIT MFR; ACTIVATION OF THE FLOT SWITCH SHALL SHUT DOWN UNIT AND SEND A LOCAL ALARM.

DUCTLESS SPLIT SYSTEMS (HEAT PUMP)

INDOOR UNIT								OUTDOOR UNIT														
SYMBOL	CFM	COOLING CAPACITY		HEATING CAPACITY		ELECTRICAL DATA		MANUFACTURER	SYMBOL	COOLING CAPACITY		EFF. SEER	HEATING CAPACITY		COMPRESSIONER	FAN	ELECTRICAL DATA		OPERATING WEIGHT	MANUFACTURER		
		IC (BTUH)	SHC (BTUH)	BTUH	BTUH	FAN FLA	MCA			VOLTAGE	IC (BTUH)		SHC (BTUH)	LR			RLA	FLA			MCA	MDRIP
A/C-2	460	12,000	9,800	10,100	10,100	0.36	1.0	208V-1#	PLA-A12EA7	DDU-2	12,000	9,800	27.0	10,100	10,100	85	12	7	28	208V-1#	95 LBS	MITSUBISHI PUY-A12NHA7

- NOTES:**
- ALL UNITS SHALL BE U.L. LISTED AND HAVE A MINIMUM SEER OF 13.
 - COOLING CAPACITIES ARE BASED ON 95° AMBIENT, 80° ENTERING AIR DRY BULB, 67° ENTERING AIR WET BULB. AIRFLOWS INDICATED ARE AT HIGH SPEED.
 - MOUNT GROUND-MOUNTED UNITS ON 6" CONCRETE PAD. MOUNT UNITS ON ROOF ON EQUIPMENT SUPPORT RAILS AS MFG. BY ROOF PRODUCTS AND SERVICE CORP. (OR EQUAL).
 - PROVIDE MANUFACTURER'S SUGGESTED CLEARANCES AROUND UNIT.
 - PROVIDE UNITS WITH MANUFACTURER'S WIND BAFFLES OR LOW AMBIENT CONTROLS FOR OPERATION DOWN TO 0° F, CONDENSATE PUMP, INVERTER COMPRESSOR, HARD WIRED WALL-MOUNTED BACKLIT CONTROLLER (EQUAL TO PAR-31MAA), INTEGRAL NON-LOCKING DISCONNECT FOR INDOOR UNIT, AND PRIMARY COOLING COIL DRAIN PAN FLOT SWITCH.
 - PROVIDE OUTDOOR UNITS WITH 6 YEAR EXTENDED COMPRESSOR WARRANTY.
 - SEE MANUFACTURER'S RECOMMENDATIONS FOR REQUIRED ADDITIONAL REFRIGERANT CHARGE AND RECOMMENDED LINE-SET LENGTHS.
 - POWER SUPPLY TO CONDENSING UNIT IS A SINGLE POINT ELECTRICAL CONNECTION FOR THE SYSTEM (A/C UNIT AND CONDENSING UNIT). THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER TO THE CONDENSING UNIT AND FROM THE CONDENSING UNIT TO THE A/C UNIT INCLUDING CODE REQUIRED DISCONNECT SWITCHES.
 - REFRIGERANT PIPING AND WIRING FOR WALL-MOUNTED INDOOR UNITS SHALL BE ROUTED IN WALL WHERE POSSIBLE. ANY EXPOSED PIPING SHALL BE PAINTED TO MATCH WALL-FINISH.
 - PRIMARY COOLING COIL DRAIN PAN SHALL BE PROVIDED WITH A FLOT SWITCH BY UNIT MFR; ACTIVATION OF THE FLOT SWITCH SHALL SHUT DOWN UNIT.

VARIABLE SPEED CONDENSING FURNACE SCHEDULE

SYMBOL	CFM	NOMINAL TONNAGE	O.A. E.S.P.	E.S.P.	EFF. (SEER)	COOLING CAPACITY		WEG	HEATING CAPACITY		EFF. (AFUE)	FAN MOTOR		ELECTRICAL DATA		WEIGHT (LBS)	MANUFACTURER	
						IC (BTUH)	SHC (BTUH)		IC (BTUH)	SHC (BTUH)		HP	FLA	MCA	VOLTAGE			
IDU-1	1200	3	205	0.5"	18.0	36,000	28,570	CARRIER	80,000	58,000	96%	1/2	7.7	8.9	15	120V-1#	240	59T8A000-14
IDU-2	1600	4	380	0.5"	17.0	47,880	36,590	CARRIER	100,000	93,000	96%	1	12.8	13.8	20	120V-1#	265	59T8A100-22
IDU-3	1200	3	200	0.5"	18.0	36,000	28,570	CARRIER	80,000	58,000	96%	1/2	7.7	8.9	15	120V-1#	240	59T8A000-14
IDU-4	1000	2 1/2	1000	0.5"	18.0	34,990	24,190	CARRIER	40,000	37,000	96%	1/2	7.7	8.9	15	120V-1#	240	59T8A000-14
IDU-5	2000	5	500	0.5"	15.5	57,740	44,670	CARRIER	120,000	112,000	96%	1	12.8	13.8	20	120V-1#	290	59T8A100-22
IDU-6	2000	5	320	0.5"	15.5	57,740	44,670	CARRIER	120,000	112,000	96%	1	12.8	13.8	20	120V-1#	290	59T8A100-22
IDU-7	2000	5	445	0.5"	15.5	57,740	44,670	CARRIER	120,000	112,000	96%	1	12.8	13.8	20	120V-1#	290	59T8A100-22
IDU-8	1400	3 1/2	275	0.5"	17.0	47,040	34,240	CARRIER	80,000	75,000	96%	1	12.8	13.8	20	120V-1#	255	59T8A000-20
IDU-9	2000	5	300	0.5"	15.5	57,740	44,670	CARRIER	120,000	112,000	96%	1	12.8	13.8	20	120V-1#	290	59T8A100-22
IDU-10	1200	3	300	0.5"	18.0	36,000	28,570	CARRIER	80,000	58,000	96%	1/2	7.7	8.9	15	120V-1#	240	59T8A000-14

- NOTES:**
- PROVIDE ALL UNITS WITH VARIABLE SPEED FAN MOTOR, ELECTRONIC 7-DAY PROGRAMMABLE THERMISTAT (COMBINATION THERMOSTAT & HUMIDISTAT) AND FILTERS.
 - ALL UNITS SHALL BE AGA CERTIFIED AND U.L. LABELED.
 - EACH FURNACE SHALL BE SUPPLIED WITH CONCENTRIC VENT/COMBUSTION-AIR KIT AS RECOMMENDED BY THE UNIT MANUFACTURER. PROVIDE FACTORY CONCENTRIC ROOF CAP FOR TERMINATION OF COMBUSTION-AIR KIT AS INDICATED ON THE DRAWINGS.
 - PROVIDE EACH UNIT WITH A IONIZATION TYPE SMOKE DETECTOR, INSTALLED IN THE RETURN DUCT WIRED TO SHUT DOWN THE UNIT UPON ACTIVATION. SMOKE DETECTOR SHALL BE SUPPLIED, WIRED FOR INTERFACE WITH FIRE ALARM SYSTEM AND UNIT SHUTDOWN BY THE ELECTRICAL CONTRACTOR. SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN DUCT BY THE MECHANICAL CONTRACTOR.

2-SPEED CONDENSING UNIT SCHEDULE (AIR COOLED)

SYMBOL	NOM. TONS	COOLING CAPACITY		EFFICIENCY SEER	EFF. EER	IPV	COMPRESSOR		FAN	ELECTRICAL DATA		WEIGHT (LBS)	MANUFACTURER	MATCHING INDOOR UNIT	
		IC (BTUH)	SHC (BTUH)				LR	RLA		FLA	MCA				FUSE
CU-1	3	36,000	28,570	18.0	13.0	N/A	83.0	15.3	2.0	21.1	30	208V-1#	312	24ANB1-136	IDU-1
CU-2	4	47,880	36,590	17.0	13.0	N/A	104.0	21.2	2.7	29.2	40	208V-1#	335	24ANB1-148	IDU-2
CU-3	3	36,000	28,570	18.0	13.0	N/A	83.0	15.3	2.0	21.1	30	208V-1#	312	24ANB1-136	IDU-3
CU-4	2 1/2	34,990	24,190	18.0	13.0	N/A	83.0	15.3	2.0	21.1	30	208V-1#	312	24ANB1-136	IDU-4
CU-5	5	57,740	44,670	15.5	12.5	N/A	152.9	28.8	2.7	38.7	60	208V-1#	336	24ANB1-180	IDU-5
CU-6	5	57,740	44,670	15.5	12.5	N/A	152.9	28.8	2.7	38.7	60	208V-1#	336	24ANB1-180	IDU-6
CU-7	5	57,740	44,670	15.5	12.5	N/A	152.9	28.8	2.7	38.7	60	208V-1#	336	24ANB1-180	IDU-7
CU-8	3 1/2	47,040	34,240	17.0	13.0	N/A	104.0	21.2	2.7	29.2	40	208V-1#	335	24ANB1-148	IDU-8
CU-9	5	57,740	44,670	15.5	12.5	N/A	152.9	28.8	2.7	38.7	60	208V-1#	336	24ANB1-180	IDU-9
CU-10	3	36,000	28,570	18.0	13.0	N/A	83.0	15.3	2.0	21.1	30	208V-1#	312	24ANB1-136	IDU-10

- NOTES:**
- COOLING CAPACITY @ 95° AMBIENT
 - ALL UNITS SHALL BE U.L. LISTED AND HAVE A TWO-SPEED COMPRESSOR WITH A MINIMUM SEER OF 12.
 - MOUNT UNITS ON A 4" THICK CONCRETE PAD AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNITS.
 - MOUNT UNITS ON ROOF ON EQUIPMENT SUPPORT RAILS AS MFG. BY ROOF PRODUCTS AND SERVICE CORP. (OR EQUAL) AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNITS.
 - PROVIDE UNITS WITH CONDENSER COIL HAIL RESISTANT AND LOW AMBIENT CONTROLS FOR OPERATION DOWN TO 0° F, CONDENSATE PUMP, INVERTER COMPRESSOR, HARD WIRED WALL-MOUNTED BACKLIT CONTROLLER (EQUAL TO PAR-31MAA), INTEGRAL NON-LOCKING DISCONNECT FOR INDOOR UNIT, AND PRIMARY COOLING COIL DRAIN PAN FLOT SWITCH.

INFRARED RADIANT HEATER SCHEDULE

SYMBOL	GAS INLET (BTUH)	MOUNTING ANGLE	TUBE LENGTH	FLUE SIZE	FLUE SIZE	ELECTRICAL DATA	MANUFACTURER
						SPACE RAY MODEL	
IH-1	40,000	45°	10'	4"	2.6	120V-1#	LTS40-10
IH-2	40,000	45°	10'	4"	2.6	120V-1#	LTS40-10

- NOTES:**
- INFRARED HEATERS SHALL BE AGA CERTIFIED.
 - UNITS SHALL BE SUPPLIED WITH LP GAS KIT, POWER-VENT, GLO-BAR OR OTHER NON-PILOT IGNITION, 120V CONTROLS. MINIMUM MOUNTING HEIGHT SHALL BE 16'-0". MAX MOUNTING HEIGHT 19'-0".
 - PROVIDE THERMOSTATS AS INDICATED ON PLANS.
 - PROVIDE 2 PSI - 0.5 PSI REGULATOR FOR EACH HEATER.

GRILLE AND DIFFUSER SCHEDULE

SYMBOL	SERVICE	CFM RANGE	FACE SIZE	NECK SIZE	TYPE	ORD #	PRICE
A	SUPPLY	0 - 100	12x12	6"	LOUVERED	NO	SMD
B	SUPPLY	0 - 10					